Translation of amended sheet annexed to the IPER

We claim:

- A process for the oligomerization of lpha-olefins having at least three carbon atoms, in which the olefin is brought into 5 contact with a catalyst system obtainable from
 - a) at least one chromium source,
- 10 at least one ligand of the formula I b)

$$\begin{array}{c|c}
R^{1} & N \\
 & N \\
 & N \\
 & R^{3}
\end{array}$$
(1)

where R1 to R3 are each, independently of one another, 20 C_4-C_{30} -alkyl which has no α , β or γ branching,

> RA is an organic group having from 1 to 30 carbon atoms which is bound via a silicon atom or a carbon atom, and

25 p is from 0 to 6, and

- at least one activator comprising a boron compound, with the molar ratio of B:Cr being at least 5.
- **30** 2. A process as claimed in claim 1, wherein the activator further comprises an alkylaluminum compound.
 - 3. A process as claimed in claim 2, wherein the activator comprises a trialkylaluminum and an alkylaluminum halide.

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- A process as claimed in any of the preceding claims, wherein 1,3,5-tri-n-dodecyl-1,3,5-triazacyclohexane is used as ligand.
- A process as claimed in any of the preceding claims, wherein **40** 5. the boron compound has the formula BZ₃ and/or Cat $^{\oplus}$ BZ₄ $^{\ominus}$, where Z is an electron-withdrawing radical and Cat^{\bigoplus} is a cation.
- A process as claimed in claim 5, wherein the boron compound 45 is selected from among trispentafluorophenylborane, N, N-dimethylanilinium tetrakispentafluorophenylborate, tri-n-butylammonium tetrakispentafluorophenylborate,

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N,N-dimethylanilinium
tetrakis(3,5-bisperfluoromethylphenyl)borate,
tri-n-butylammonium
tetrakis(3,5-bisperfluoromethylphenyl)borate and tritylium
tetrakispentafluorophenylborate.

7. A process as claimed in any of the preceding claims, wherein 1-butene is used as olefin.